

## REMARKS

The Office Action presents a restriction and species requirement, requesting restriction to one of the following inventions: Group I, claims 1-6 (in part), 13-16 (in part), 29 (in part) are drawn to a pharmaceutical composition comprising a bone morphogenic protein antagonist or bone morphogenic protein receptor antagonist or a prodrug thereof; Group II, claims 1-6 (in part), 7-8, 13-16 (in part), 29 (in part) are drawn to a pharmaceutical composition comprising a bone morphogenic protein antagonist or bone morphogenic protein receptor antagonist or a prodrug thereof in conjunction with a second therapeutic agent; Group III, claims 9-10 are drawn to a vector comprising a promoter operably linked to a polynucleotide encoding a modified bone morphogenic polypeptide that binds to a bone morphogenic protein receptor; and Group IV, claims 17-28 are drawn to methods of treatment comprising administering a bone morphogenic polypeptide antagonist. In addition, Applicants are required to identify the species elected.

In response to this requirement, Applicants elect to prosecute Group I, Claims 1-6, 13-16 and 29 drawn to a pharmaceutical composition comprising a bone morphogenic protein antagonist or bone morphogenic protein receptor antagonist or a prodrug thereof. The preferred species is SEQ ID NO: 1. Applicants submit that claims 1, 3-6, 13-16, and 29 encompass this elected species.

Applicants submit for entry amended claim 29 to correct a typographical error.

The Examiner suggests that claim 1 may be anticipated by the prior art, and thus lacks a special technical feature. Specifically the Examiner cites WO00/56879 to Weber et al. as teaching at page 12, last paragraph:

“As one type of antagonists for natural actions of BMPs, BMP monomers were synthesized, which bind BMP-receptors without leading to the formation of activated receptor complexes”

Applicants respectfully traverse this assertion.

*Weber* et al teaches antagonists of bone morphogenic proteins (BMPs) activity. In particular, *Weber* teaches the use of native monomers or modified monomers of BMPs as BMP antagonists, wherein a monomer or modified monomer may bind to one of two receptor molecules and thereby hinder the binding of a native dimeric BMP to the receptor complex. Dimeric BMP binding is required for BMP activation of heterotrophic ossification. *Weber*, therefore, does not teach, disclose or suggest that polypeptides derived from a CAN-like protein

such as noggin, chordin and the like may be used as a monomeric antagonist of BMP as is claimed in the present application.

In addition, *Weber* is directed solely to the treatment of ossification process, i.e. bone deposition and not to the pathophysiological process of inflammation, and does not teach, disclose or suggest compositions or formulations suitable for use in the effective inhibition of vascular inflammation, as are claimed in the present application. Accordingly, Applicants assert that claim 1 of the present application does have a special technical feature shared with the other claims therein.

Applicants believe no fee is due in addition to those that may be provided for with this Response. The Commissioner is hereby authorized to credit any overpayment and charge any additional fees due to Deposit Account 20-0779.

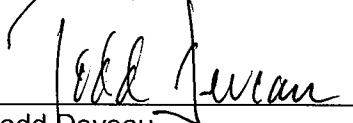
#### **CONCLUSION**

In light of the foregoing remarks set forth above, Applicants respectfully submit that the present application is in condition for allowance and as such, favorable allowance of the present application is hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully Submitted,

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